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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/889,908

12/12/2001

Gunter Fuhr

B1180/20003

2975

3000

7590

12/11/2003

CAESAR, RIVISE, BERNSTEIN,  
COHEN & POKOTILOW, LTD.  
12TH FLOOR, SEVEN PENN CENTER  
1635 MARKET STREET  
PHILADELPHIA, PA 19103-2212

EXAMINER

FULLER, RODNEY EVAN

ART UNIT

PAPER NUMBER

2851

DATE MAILED: 12/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/889,908	FUHR ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Rodney E Fuller	2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 August 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 22-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Remarks*

1. In response to applicant's Amendment, dated August 14, 2003, the examiner acknowledges the corrections of the objections related to the Specification and Drawings set forth in the Office Action mailed August 5, 2003.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 22-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Maekawa, et al. (US 5,644,388).

Regarding claim 31, Maekawa discloses "an optical imaging unit (Fig. 1, ref.# 3-13) for enlarged imaging of at least one resting or moving object (column 3, line 61) on a structured mask (Fig. 1, ref.# 1) having at least one light transmitting segment adapted to transmit light from a flat section to a detector unit (Fig. 1, ref.# 10), wherein the object is located at least partially or temporarily in the flat section and the flat section has a characteristic dimension smaller than a dimension of the object or a movement path of the object; a detector unit (Fig. 1, ref.# 10) for detecting a quantity of light transmitted by the structured mask and for forming a detector signal having a predetermined relationship with the quantity of light; and an evaluation unit (Fig. 1, ref.# 11) for evaluation of the detector signal in regard to at least one of a presence

of the object, a position of the object, a shape of the object and a temporal change of the position.”

Regarding claim 32, Maekawa discloses “wherein the optical imaging unit is part of a microscope.” (column 1, line 55)

Regarding claim 33, Maekawa discloses “wherein the structured mask (Fig. 1, ref.# 1) is positioned in a beam path of the microscope.”

Regarding claim 34, Maekawa discloses “wherein the structured mask is a transmission screen with at least one transparent segment.” (column 6, lines 18-23)

Regarding claims 35 and 36, Maekawa discloses “wherein multiple segments are provided which are positioned two-dimensionally in a plane of the structured mask.” (column 6, lines 18-23)

Regarding claim 37, Maekawa discloses “wherein the detector unit (Fig. 1, ref.# 10, 14) is adapted for integrated detection of a partial image of the object or a movement path of the object transmitted (Fig. 1, ref.# 14) or reflected (Fig. 1, ref.# 10) by the structured mask.”

Regarding claim 38, Maekawa discloses wherein the device detects “particles in a fluidic microsystem.” (abstract, line 1)

Regarding claim 39, Maekawa discloses “wherein the particles in the fluidic microsystem are subjected to at least one of hydrodynamic, acoustic, magnetic and electrical forces.” (column 6, line 26)

The method steps of claims 22-30, 42 and 43 are met by the operation of Maekawa as applied to claims 31-41.

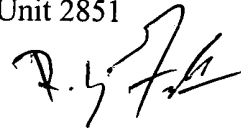
***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Hasen, et al. (US 2002/0003625) and Frank, et al. (US 5,798,827) each discloses an optical imaging unit for enlarging at least one resting or moving object, a detector unit and an evaluation unit of the detector signal.
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney E Fuller whose telephone number is 703-306-5641. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on 703-308-1436. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Rodney E Fuller  
Primary Examiner  
Art Unit 2851



December 2, 2003